

A NEW *ERIGERON* (ASTERACEAE: ASTEREA) FROM  
TAMAULIPAS, MÉXICO

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ABSTRACT

A new species, *Erigeron cieloensis*, is described from the Gómez Farías region of Tamaulipas, México. It is closely related to *E. basilobatus*, a more widespread species of the eastern sierra.

KEY WORDS: *Erigeron*, Asteraceae, Astereae, México.

Three collections of *Erigeron* from the Gómez Farías region of Tamaulipas, México, previously identified as *Erigeron basilobatus* S.F. Blake, are now recognized as an undescribed species. The two taxa are similar, but numerous collections of *E. basilobatus* have been made in the last 5-10 years, allowing it to be more accurately delimited. All of the known collections of the new species were made by Dr. Al Richardson, whose collections from that area have provided numerous other novelties.

*Erigeron cieloensis* Nesom, *spec. nov.* TYPE: MÉXICO. Tamaulipas: Mpio. Gómez Farías, Rancho del Cielo, above Olla de Nubes, [oak to pine-oak woods, 1800-2100 m.,] 22 Jul 1968, A. Richardson 776 (HOLOTYPE: TEX!).

*Erigeron basilobatus* S.F. Blake *similis* sed caulibus et foliis strigosis, foliis marginibus ciliatis, et setis pappo paucioribus differt.

Perennials from fibrous roots and slender rhizomes. Stems 20-45 cm tall, with prominent orange-yellow ribs, strigose with antrorsely appressed hairs 0.3-0.5 mm long. Leaf lamina sparsely strigose, the margins ciliate with thick based, upturned hairs with orange crosswalls, the basal leaves in persistent rosettes. spatulate, 2-4 cm long, with blades ovate to obovate, 1-3 cm wide, with 4-6 pairs of mucronulate teeth, sharply attenuate to a narrow petiole, half the leaf length, cauline leaves restricted to the lower half of the stem, clasping, becoming lanceolate upward. Heads 10-12 mm wide, on long, naked peduncles; phyllaries thin, 6-7 mm long, lanceolate, with 3, parallel, orange veins, in 3-4

series of even length. Ray flowers 90-120, the corollas white, 13-15 mm long with ligules 1.0-1.3 mm wide, not coiling or reflexing. Disc corollas 3.0-4.0 mm long, slightly constricted in the lower 1/4, not indurated or inflated, the 5 lobes deltate; style branches with shallowly deltate to shallowly triangular collecting appendages 0.1-0.2 mm long. Achenes compressed, with 2, orange nerves, mature size not seen; pappus of 15-18 bristles, with a few outer setae.

Additional collections examined: MÉXICO. Tamaulipas: Type locality, 4 Jul 1968, *Richardson 568* (TEX); 22 Jul 1968, *Richardson 781* (TEX).

*Erigeron cieloensis* is closely similar to *E. basilobatus*, and the two can be justifiably regarded as sister species. Both have similar habits, prominently ribbed stems, similar leaf morphology and arrangement, heads on long, naked peduncles, 3 veined phyllaries, and long ray corollas. Both taxa appear to be very constant in their morphology, differing by the features summarized in the following couplet.

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| 1. Stems moderately pilose with deflexed hairs 0.5-1.1 mm long; leaf lamina hispid-pilose, the margins not with differentiated cilia; pappus bristles 26-32 .....  | <i>E. basilobatus</i> |
| 1. Stems sparsely strigose with antrorsely appressed hairs 0.3-0.5 mm long to nearly glabrous; leaf lamina sparsely strigose, the margins with prominent, thick based, upturned cilia; pappus bristles 15-18 ... | <i>E. cieloensis</i>  |

*Erigeron cieloensis* appears to be a narrow endemic, restricted to the Gómez Farías area (Map 1), while *E. basilobatus* is more widespread. In addition to the localities mapped for *E. basilobatus*, it is known from Puebla by a single collection (Puebla, 1.3 mi N of the Tlaxcala state line, 2 Sep 1961, *De Jong 1219* [TEX]).

Essentially the same pattern of geographic distribution found in *Erigeron basilobatus-E. cieloensis* can be seen in other species pairs, with the narrow endemic in the Gómez Farías region: *Macromeria notata* I. M. Johnston - *M. alba* Nesom (Nesom 1989); *Omphalodes cardiophylla* A. Gray - *O. richardsonii* Nesom (Nesom 1988); *Eupatorium reybinsonii* (B. Turner) B. Turner - *E. richardsonii* (B. Turner) B. Turner (Turner 1983); *Verbesina oreophila* Woot. & Standl. - *V. richardsonii* B. Turner (Turner 1985). Other known endemic species of the Gómez Farías region appear to have their closest relatives distributed to the south.



Map 1. Distribution of *Erigeron basilobatus* and *E. cicloensis*. See text for additional record of *E. basilobatus*.

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